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# PULPWOOD PRODUCTION in the Northeast 1973



USDA FOREST SERVICE RESOURCE BULLETIN NE-37

NORTHEASTERN FOREST EXPERIMENT STATION FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE 6816 MARKET STREET, UPPER DARBY, PA. 19082 F. BRYAN CLARK, STATION DIRECTOR PSW FOREST AND PAINS

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### Foreword

United States consumption of paper currently stands at 640 pounds per person annually and this rate will no doubt increase if the Nation's economy booms. The pulp and paper industry is approaching a crisis similar to that of the oil industry, because they have expanded the capacity of their existing facilities to the limit and must now get on with the job of building new ones. The Northeast has been particularly hard put because many of its older facilities were deemed detrimental to the environment and were shut down.

A major challenge that faces the industry is to determine the best means of catching up with and satisfying increased future demand, while at the same time assuring an adequate return on the huge capital investment that will be needed. The rising cost of raw materials has become an important consideration in studying the feasibility of constructing new facilities. Such long-term solutions as expanding forest productivity by planting superior trees, fertilizing high-potential stands, and reclaiming submarginal farmlands for forestry do not provide the solution to today's wood shortages.

The short-term solution that now seems most promising is the improvement of wood yield by pulping whole trees. Total-tree chipping boosts wood harvesting productivity and improves the per-acre fiber yield because the branchwood, topwood, bark, and leaves are recovered as well as the stemwood. In addition, fiber can be recovered from trees that in the past would have been considered too small or too rough to utilize, because such trees now are chipped at the har-

vesting site.

Several total-tree harvesters were operating in the Northeast in 1973. One such harvester (see cover picture) was chipping mixed hardwoods in an Ohio land-clearing operation and selling the chips to a nearby kraft pulpmill. Spokesmen at the mill say that the monetary loss from a decrease in pulp yield and an increase in the chemicals used can be more than offset by lower costs from automated harvesting and chip handling.

# PULPWOOD PRODUCTION in the Northeast 1973

by James T. Bones and David R. Dickson

### The Authors

JAMES T. BONES, research forester, received his bachelor's degree in soil conservation from Utah State University in 1952 and his master's degree in forest management from the same university in 1956. He worked at the Pacific Northwest Station and the Institute of Northern Forestry until 1965, when he became a United Nations forestry advisor to the Government of Colombia in South America. After his return in March 1968, he transferred to the Northeastern Forest Experiment Station. He is now stationed in Upper Darby, Pa., where he is working in the timber-removals phase of the Forest Survey.

DAVID R. DICKSON, research forester, received his bachelor's degree in forestry from the University of New Hampshire in 1954. He joined the Lake States Forest Experiment Station in 1954. After serving 2 years in the Army, he joined the Northeastern Forest Experiment Station in 1957. Since that time he has been involved in the many aspects of the field and office phases of the Forest Survey. He is now responsible for operation of the data processing system to compile, summarize and analyze resource data from the many and varied resource studies of the Forest Survey.



### Background

THIS ANNUAL REPORT is based on a canvass of all pulpmills in the Northeast that use wood—either roundwood or plant residues—as a basic raw material for a variety of products. Cross-boundary shipments were traced by exchanging information with neighboring experiment stations that conduct similar canvasses. Mills that use pulpwood as a raw material in producing insulation board and hard-board were also included in the canvass.

The statistics for production from round-wood reported in this bulletin are based upon mill receipts, which are subject to fluctuations caused by uneven wood-inventory buildups or liquidations from year to year. The plant residues are received at the pulpmill mostly in chip form. Origins of mill receipts of pulpwood from roundwood are reported by county where harvested. However, pulpwood from plant residue can be traced only to the state where it was produced; some of the logs from which the residue came were probably harvested in states other than the one in which they were processed.

# Pulpwood Production Sets New Record

The 7,545,400 cords of pulpwood produced in the 14 northeastern states (Connecticut, Delaware, Kentucky, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, and West Virginia) in 1973 represented an increase of 29 percent over the 5,871,500 cords reported in 1972, and 13 percent over the previous record harvest of 6,649,500 cords reported in 1970.

The increase was due to sharp rises in production of both softwood and hardwood roundwood and of hardwood chip production from plant residues (fig. 1). Softwood chip production was up also, but not as dramatically as the other segments of pulpwood production. Woodyard inventories have recovered from their low 1972 levels, and most northeastern pulpmills are operating at or near capacity. Several companies are now accepting total tree chips when woodyard inventories

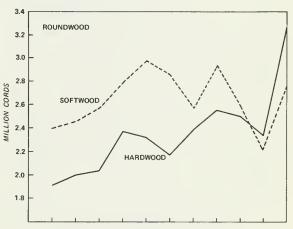
are low. One hardwood kraft producer reported that 30 percent of last year's receipts came from total tree chips.

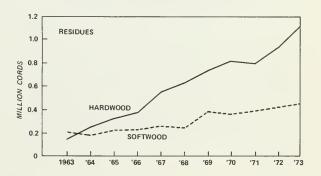
Roundwood pulpwood production from hardwoods was greater than that of softwoods; it accounted for 54 percent of the total harvest in 1973. Total production of chips from plant residues increased 234,600 cord equivalents over 1972. Hardwoods accounted for 58 percent of all pulpwood produced in 1973, up from 55 percent in 1972.

Receipts of pulpwood at woodpulp mills in the Northeast totaled 8,257,100 cords in 1973. These receipts included wood harvested in the Northeast and pulpwood imported from other regions. Hardwood receipts exceeded those of softwoods by 1,169,700 cords. Total receipts exceeded total production by 711,700 cords (table 2).

Five of the 14 states (Connecticut, Delaware, Massachusetts, Vermont, and West Virginia) produced more wood than they received. Delaware, Massachusetts, and West

Figure 1.—Pulpwood production for all states, by years and sources of wood.





Virginia had no operating woodpulp mills. Vermont and Connecticut each had one. Pulpwood receipts at Kentucky woodpulp mills continued to be outstanding; they increased 63 percent above the 535,600 cords that were received in 1972. Other states that registered significant increases in 1973 receipts over 1972 included Maine (up 24 percent), Pennsylvania (up 49 percent), and Ohio (up 29 percent).

In previous years, a portion of the north-eastern requirement for softwood pulpwood was satisfied by shipments of Canadian pulpwood into the Northeast. This trend has been changing as more southern pulpwood has been finding its way into northern woodyards. In 1973, more than half of the round softwood shipments into the Northeast came from southern states. Also, for the first time, imports of hardwood roundwood exceeded imports of softwoods.

# Production from Roundwood Jumps 32 Percent

The production of pulpwood from roundwood increased 1,439,300 cords—a 32 percent increase over 1972. The 5,992,000 cords of roundwood produced in 1973 represents the highest production level attained since the annual production surveys were initiated in the Northeast in 1963.

The 1973 pulpwood production from roundwood was up from 1972 in 11 of the 14 states. Only Connecticut, Delaware, and New Jersey reported production decreases. Production increases of 30 percent or more were recorded in Kentucky, Maine, Pennsylvania, and West Virginia.

# Twenty Counties Top 50-Thousand-Cord Mark

Twenty counties in six states produced more than 50,000 cords of pulpwood from roundwood in 1973. This number represents an increase of 7 counties over the 1972 level and equals the previous record that was set in 1967. The 3.8 million cords of roundwood harvested from these counties represents 63 percent of the total roundwood harvest in the Northeast.

A West Virginia county exceeded the 50,000-cord level for the first time since 1967, and Pennsylvania counties were represented for the first time since 1969. Counties that produced more than 50,000 cords of pulpwood from roundwood in 1973, and their production totals, are:

County	Production (thousand cords)
Aroostook, Maine	649.8
Piscataguis, Maine	532.3
Sommerset, Maine	501.6
Penobscot, Maine	378.0
Washington, Maine	371.1
Coos, New Hampshire	198.7
Oxford, Maine	185.4
Franklin, Maine	123.1
Clearfield, Pennsylvania	86.3
Susquehanna, Pennsylvania	85.4
Hancock, Maine	83.2
Lycoming, Pennsylvania	82.0
Clinton, Pennsylvania	81.5
Monroe, West Virginia	71.0
Essex, Vermont	68.5
Androscoggin, Maine	68.3
Center, Pennsylvania	65.2
St. Lawrence, New York	57.2
Essex, New York	56.8
Franklin, New York	53.4

# Roundwood Harvest as Related to Growing-Stock Inventory

Although figures 3, 4, and 5 show the total roundwood harvest by production class and county in the Northeast, these figures do not relate the volume harvested to the volume of growing-stock trees that are actually present. Growing-stock volume is net volume in cubic feet of sound live trees of commercial species that are 5.0 inches dbh or larger, from a 1-foot stump to a minimum 4.0-inch top diameter outside bark of the central bole, or to the point where the bole breaks into limbs. The growing-stock volumes by species group and states that are used for making this comparison are based on those compiled for the 1970 National Timber Review.

The following tabulation of harvesting intensity shows the volume of growing stock present per unit harvested, by state and species group—in thousand cubic feet of growing stock present for each cord of pulpwood harvested in 1972:

State	Soft- wood	State	${\it Hard-wood}$
Maryland	5.0	Maine	6.5
Delaware	6.8	New Hampshire	12.8
Maine	6.9	Ohio	15.5
West Virginia	8.9	Pennsylvania	19.9
Northeast average	10.1	Northeast average	22.4
Rhode Island	12.4	New York	28.0
New Jersey	15.1	Vermont	31.6
Kentucky	18.3	Maryland	36.3
New York	22.3	Kentucky	40.3
Vermont	23.6	Rhode Island	60.2
Ohio	25.8	Delaware	70.2
Connecticut	44.7	West Virginia	73.0
Massachusetts	50.0	Connecticut	428.3
Pennsylvania	51.5	Massachusetts	590.0
New Hampshire	53.1	New Jersey	.,343.7

The states have been ranked (from top down) from the state in which the roundwood harvest was most intensive to the state in which the harvest was the least intensive. These rankings and the regional averages should not be viewed as an index or standard for harvesting, but simply as a means of directing individuals engaged in pulpwood procurement from several alternative areas toward the most promising one.

For each cord of pulpwood harvested in the Northeast in 1973, there were 10,000 cubic feet of softwood growing stock and 22,400 cubic feet of hardwood growing stock. The softwood harvest was more intensive than the regional average in Maryland, Delaware, Maine, and West Virginia. The hardwood harvest was more intensive than the regional average in Maine, New Hampshire, Ohio, and Pennsylvania. Harvesting intensity was relatively low in the urbanizing states of the Northeast, such as Massachusetts, Connecticut, and New Jersey.

# Wood Chip Production Increases 18 Percent

The production of wood chips from plant residues for pulpwood increased 18 percent over the 1,318,800 cord equivalents produced in 1972. This increase was attributable mostly to high primary wood-manufacturing rates in the Northeast, which in turn generated larger quantities of coarse plant residues.

Pulpwood chip production by states in 1972 and 1973 are compared as follows:

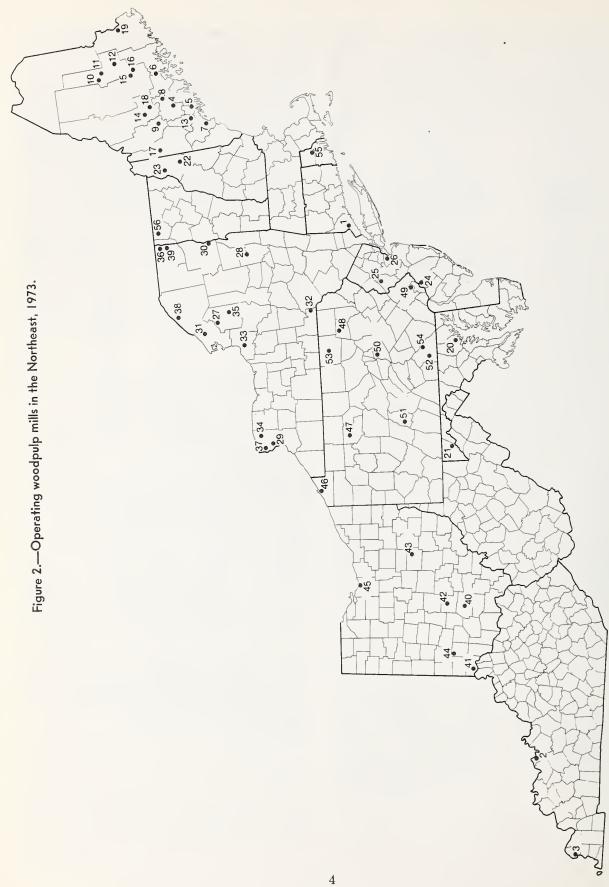
	1972 (thousand cord equivalents)	1973 (thousand cord equivalents)	Change (per- cent)
Connecticut	0.5	= 1.8	(a)
Delaware	1.1	1.0	<u>-</u> 9
Kentucky	156.7	230.3	$\pm 47$
Maine	290.4	314.5	+8
Maryland	114.9	101.5	-12
Massachusetts	13.0	30.7	(a)
New Hampshire	110.7	105.2	-5
New Jersey	1.8	5.7	(a)
New York	135.5	160.9	+19
Ohio	94.1	145.2	+54
Pennsylvania	222.3	243.1	+9
Rhode Island	1.7	1.7	(b)
Vermont	31.1	52.9	+70
West Virginia	145.0	158.9	+10
Total	1,318.8	1,553.4	+18

<sup>&</sup>lt;sup>a</sup> More than 100 percent.

Chip production was up in 10 states. Connecticut, Massachusetts, and New Jersey showed the highest percentage gains (more than 100 percent), and Kentucky showed the highest absolute volume gain (73,600 cord equivalents). The 1973 production of chips from plant residues accounted for 21 percent of the northeastern pulpwood production total. This represented a drop of almost 2 percentage points from 1972, because of the sharp increases in round pulpwood output in 1973.

Hardwood chip production from plant residues rose 21 percent, while softwood chip production rose only 11 percent. Chip production for both hardwoods and softwoods in 1973 stand at all-time record levels.

<sup>&</sup>lt;sup>b</sup> No change.



# OPERATING WOODPULP MILLS IN THE NORTHEAST, 1973

Number	Mill name and location	Capacity (tons/24 hrs.)	Number	Mill name and location	Capacity (tons/24 hrs.)
1:	CONNECTICUT Tilo Company, Strafford	35	27.	NEW YORK Latex Fiber Industries, Beaver Falls International Paner Co. Corinth	70 255
%i&	KENTUCKY Wescor and Western Kraft, Hawesville Westvaco, Wickliffe	550 600	30.55 30.55 31.50	International Paper Co., No. Tonawanda International Paper Co., Ticonderoga St. Regis Paper Co., Deferiet	140 240 300
*. rv. a	Statler Tissue Co., Augusta Pejepscot Paper Co., Brunswick Ct. Boxic Daylor Co. Brunswick	270 1115	\$ <del>\$</del> \$ \$ \$	Armstrong Cork Co., Fulton Flintkote Co., Lockport Georgia Pacific Corp., Lyons Falls Georgia Pacific Corn., Plattsburgh	130 60 120 100
ు గచిత్త	Scott Paper Co., Cumberland Falls Scott Paper Co., Winslow International Paper Co., Jav	320 300 490 775	37. 38. 39.	Cellu-Products, Inc., Niagara Falls Diamond International Corp., Ogdensburg Diamond International Corp., Plattsburgh	$\frac{100}{110}$
*10. 11.	Great Northern Nekoosa Corp., Millinocket Great Northern Nekoosa Corp., E. Millinocket Premaid Corp. Lincoln	1,375 920 980	40.	OHIO Mead Corp., Chillicothe	009
13. 15. 16.	U.S. Gypsum, Lisbon Falls Kennebec River Pulp Co., Madison Lily Tulip Corp., Old Town Diamond International Corp., Old Town	100 135 750 750	44.52.5.4.4.	Celotex Corp., Cincinnati Container Corp. of America, Circleville Stone Container Corp., Coshocton Logan-Long Co., Franklin	100 300 650 80
*17. 18.	Oxford Paper Co., Rumford Keyes Fibre Co., Shawmut Georgia Pacific Corn. Woodland	670 105 1 037	45.	Certain-Teed Products Corp., Milan PENNSYLVANIA	06
20. 21.	Congoleum Industries, Finksburg Westvaco, Luke	45	46. 48. 49.	Hammermill Paper Co., Erie Pentech Papers Inc., Johnsonburg Charmin Paper Products Co., Mehoopany Celotex Corp., Philadelphia	700 170 Unknown 160
*22. 23.	at in El	975 250	50 52 54 54	Celotex Corp., Sunbury Appleton Papers, Inc., Roaring Springs P. H. Glatfelter Co., Spring Grove Masonite Corp., Towanda Certain-Teed Products Corp., York	240 1280 525 80 80
24. 25.	NEW JERSEY GAF Corp., Gloucester City Johns-Manville Products Corp., Manville	192	55.	RHODE ISLAND Bird and Son. Inc., Phillipdale	275
26.	Celotex Corp., Perth Amboy	100	56.	VERMONT Saxon Industries, Sheldon Springs	20

\* More than one pulpmill operating.

### Tabular Data

- Table 1.—Total production of pulpwood in the Northeast, by source and state, 1973. (In thousands of rough cords)
- Table 2.—Total production and receipts of pulpwood in the Northeast, by state and species group, 1973. (In thousands of rough cords)
- Table 3.—Pulpwood production from roundwood in the Northeast, by state and species group, 1973. (In thousands of rough cords)
- Table 4.—Pulpwood chip production from plant residues in the Northeast, by state and species group, 1973. (In thousands of rough cord equivalents)
- Table 5.—Pulpwood receipts from roundwood in the Northeast, by state and species group, 1973. (In thousands of rough cords)
- Table 6.—Pulpwood chip receipts from plant residues in the Northeast, by state and species group, 1973. (In thousands of rough cord equivalents)
- Table 7.—Pulpwood from roundwood received from states outside the Northeast, by state (or province) of origin and species group, 1973. (In thousands of rough cords).
- Table 8.—Pulpwood chip receipts from woodusing plants outside the Northeast, by state (or province) of origin and species group, 1973. (In thousands of rough cord equivalents)

- Table 9.—Pulpwood production from roundwood in the Northeast, by state and species group, 1973. (In thousands of rough cords)
- Table 10.—Pulpwood production from roundwood in Kentucky and Ohio, by state and county and species group, 1973. (In thousands of rough cords)
- Table 11.—Pulpwood production from roundwood in Southern New England, by state and county and species group, 1973. (In thousands of rough cords)
- Table 12.—Pulpwood production from roundwood in Northern New England, by state and county and species group, 1973. (In thousands of rough cords)
- Table 13.—Pulpwood production from roundwood in New York, by county and species group, 1973. (In thousands of rough cords)
- Table 14.—Pulpwood production from roundwood in Pennsylvania, by county and species group, 1973. (In thousands of rough cords)
- Table 15.—Pulpwood production from roundwood in Delaware, Maryland, and New Jersey, by state and county and species group, 1973. (In thousands of rough cords)
- Table 16.—Pulpwood production from round-wood in West Virginia, by county and species group, 1973. (In thousands of rough cords)

Table 1.—Total production of pulpwood in the Northeast, by source and state, 1973

[In thousands of rough cords]<sup>1</sup>

		Source	
State	From roundwood	From plant residues	From all sources
Connecticut	9.0	1.8	10.8
Delaware	40.0	1.0	41.0
Kentucky	230.7	230.3	461.0
Maine	3.140.7	314.5	3,455.2
Maryland	175.6	101.5	277.1
Massachusetts	18.7	30.7	49.4
New Hampshire	230.7	105.2	335.9
New Jersey	26.6	5.7	32.3
New York	476.8	160.9	637.7
Ohio	269.4	145.2	414.6
Pennsylvania	969.5	243.1	1,212.6
Rhode Island	5.7	1.7	7.4
Vermont	140.4	52.9	193.3
West Virginia	258.2	158.9	417.1
All states	5,992.0	1,553.4	7,545.4

<sup>&</sup>lt;sup>1</sup> 128 cubic feet of wood, bark, and air space.

Table 2.—Total production and receipts of pulpwood in the Northeast, by state and species group, 1973

Q	Total p	roduction	Total	receipts	Production surplus (+)
State	Softwood	Hardwood	Softwood	Hardwood	or deficit (—
Connecticut	5.3	5.5	(D)	(D)	+(D)
Delaware	33.9	7.1	`	<u> </u>	+41.0
Kentucky	43.3	417.7	178.0	693.8	-410.8
Maine	2,376.8	1,078.4	2,591.6	1,069.0	-205.4
Maryland	155.4	121.7	119.1	308.3	-150.3
Massachusetts	31.6	17.8		_	+49.4
New Hampshire	128.3	207.6	110.3	404.8	-179.2
New Jersey	28.6	3.7	51.5	13.7	-32.9
New York	173.5	464.2	258.3	484.0	-104.6
Ohio	7.9	406.7	10.5	552.8	-148.7
Pennsylvania	46.0	1,166.6	184.3	1,173.8	-145.5
Rhode Island	1.8	5.6	(D)	(D)	-(D)
Vermont	82.0	111.3	$(\bar{\mathbf{D}})$	$(\overline{\mathbf{D}})$	$+(\mathbf{D})$
West Virginia	81.7	335.4			+417.1
All states	3,196.1	4,349.3	3,543.7	4,713.4	-711.7

<sup>(</sup>D) Data withheld to avoid disclosure for individual mills.

Table 3.—Pulpwood production from roundwood in the Northeast, by state and species group, 1973

[In thousands of rough cords]

		Softwood	pood			Har	Hardwood		
	ford test	Shipped to	Shipped to other states			Shipped to	Shipped to other states		
State	retained in state	In North-	Outside North- east	Total softwood	Cut and retained in state	In North-	Outside North- east	Total hardwood	Total production
Connecticut	3.0	2.1	]	5.1	1	3.9	1	3.9	9.0
Delaware		21.6	12.3	33.9	l	4.4	1.7	6.1	40.0
Kentucky	]	1	34.0	34.0	89.2	36.9	20.6	196.7	230.7
Maine	2.125.2	20.3	5.	2,145.7	924.7	70.3	1	995.0	3,140.7
Maryland	18.9	27.1	59.6	105.6	61.6	7.7	7.	70.0	175.6
Massachusetts	1	15.4	]	15.4	l	3.3		3.3	18.7
New Hampshire	56.9	27.7	I	54.6	160.1	16.0	1	176.1	230.7
New Jersey	25.6	]	1	25.6	1.0	*	1	1.0	56.6
New York	145.9	1.4	]	147.3	269.1	26.2	34.2	329.5	476.8
Ohio	1	4.8	l	4.8	263.1	1.3	6.	264.6	269.4
Pennsylvania	23.0	8.1	]	31.1	880.1	58.3		938.4	969.5
Rhode Island	1.6		1	1.6	4.1	1	]	4.1	5.7
Vermont	12.8	51.1	(*)	63.9	1	76.5	1	76.5	140.4
West Virginia		53.6	20.6	74.2	]	86.1	6.76	184.0	258.2
All states	2,382.9	233.2	126.7	2,742.8	2,653.0	390.9	205.3	3,249.2	5,992.0
and the same of th									

<sup>(\*)</sup> Less than 50 cords.

Table 4.—Pulpwood chip production from plant residues in the Northeast, by state and species group, 1973 [In thousands of rough cord equivalents]

		Total production	1.8	1.0	230.3	314.5	101.5	30.7	105.2	5.7	160.9	145.2	243.1	1.7	52.9	158.9	1,553.4
1		Total hardwood	1.6	1.0	221.0	83.4	51.7	14.5	31.5	2.7	134.7	142.1	228.2	1.5	34.8	151.4	1,100.1
Hardwood	other states	Outside North- east	1	]	56.7	1	1	]	1	1	20.0	]	1	1	1	70.7	147.4
Har	Shipped to other states	In North- east	1.6	1.0	35.1	12.4	36.6	14.5	8.9	1.1	22.4	1.1	57.9	1.5	34.8	80.7	309.6
		and retained in state		1	129.2	71.0	15.1	1	22.6	1.6	92.3	141.0	170.3	I	I	1	643.1
		Total Softwood	0.2	I	9.3	231.1	49.8	16.2	73.7	3.0	26.2	3.1	14.9	62	18.1	7.5	453.3
	Shipped to other states	Outside North- east	1	]	2.5	I	14.0	I	I	1	1	I	1	1	1	5.0	21.5
Softwood	Shipped to	In North- east	0.2	]	6.8	3.2	34.5	16.2	29.5	1.2	11.1	7.	2.5	c;	18.1	2.5	126.1
	Produced	and retained in state	]	]	]	227.9	1.3	]	44.5	1.8	15.1	2.4	12.7	1	]	1	305.7
		State	Connecticut	Delaware	Kentucky	Maine	Maryland	Massachusetts	New Hampshire	New Jersey	New York	Ohio	Pennsylvania	Rhode Island	Vermont	West Virginia	All states

Table 5.—Pulpwood receipts from roundwood in the Northeast, by state and species group, 1973

[In thousands of rough cords]

		Total receipts	(D)	544.3	3,262.1	307.6	402.2	26.6	526.4	329.2	1,060.0	<u>(a</u>	(D)	6,510.9
		Total hardwood	(D)	405.5	985.2	198.4	348.9	1.0	312.1	329.2	935.3	<u>(D</u>	(D)	3,528.8
Hardwood	other states	Outside North- east	(D)	316.3	46.1	14.8	60.5	l	10.2	26.1	10.9	<u>(D</u>	<u>(</u>	484.9
Hare	Receipts from	In North- east	(Đ	:	14.4	122.0	128.3	l	32.8	40.0	44.3	<u>(D</u>	(D	390.9
	14	Cut and retained in state	1	89.2	924.7	61.6	160.1	1.0	269.1	263.1	880.1	4.1	l	2,653.0
		Total Softwood	<u>(a)</u>	138.8	2.276.9	109.2	53.3	25.6	214.3	Ì	124.7	(D)	(D)	2,982.1
poo/	other states	Outside North- east	<u>(a)</u>	138.8	141,3	35.4	1.2	l	5.8	1	40.0	(D)	(D)	366.1
Softwood	eceipts from	In North- east	(D)	`	10.4	54.9	25.2	l	62.6	1	61.7	(D)	( <u>D</u>	233.1
	R	Cut and retained in state	3.0	1	2.125.2	18.9	26.9	25.6	145.9	1	23.0	1.6	12.8	2,382.9
		State <sup>1</sup>	Connecticut	Kentucky	Maine	Maryland	New Hampshire	New Jersey	New York	Ohio	Pennsylvania	Rhode Island	Vermont	All states

<sup>&</sup>lt;sup>1</sup> States with no pulpmills are omitted. (D) Data withheld to avoid disclosure for individual mills.

Table 6.—Pulpwood chip receipts from plant residues in the Northeast, by state and species group, 19731

[In thousands of rough cord equivalents]

		Sof	Softwood			Har	Hardwood		
	Droduced	Receipts fr	om other sta	tes	Droduood	Receipts fro	rom other states	ites	
State <sup>2</sup>	and retained in state	In North-	Outside North- east	Total Softwood	and retained in state	In North- east	Outside North- east	Total hardwood	Total receipts
Connecticut		(D)	(D)	(D)	1	(D)	(D)	(D)	(D)
Kentucky	1	·	39.2	39.2	129.2	.	159.1	288.3	327.5
Maine	227.9	21.9	64.9	314.7	71.0	10.3	2.5	83.8	398.5
Maryland	1.3	4.3	4.3	6.6	15.1	91.5	3.3	109.9	119.8
New Hampshire	44.5	5.6	6.9	57.0	22.6	19.6	13.7	55.9	112.9
New Jersey	1.8	20.6	3.5	25.9	1.6	10.1	1.0	12.7	38.6
New York	15.1	27.9	1.0	44.0	92.3	47.7	31.9	171.9	215.9
Ohio	2.4	7.1	1.0	10.5	141.0	77.0	5.6	223.6	234.1
Pennsylvania	12.7	37.7	9.2	59.6	170.3	53.2	15.0	238.5	298.1
Rhode Island	1	(D)	(D)	(D)	l	(D)	(D)	(D)	(D)
Vermont	1	(D)	(D)	<u>(D</u>	l	(D)	(D)	(D)	(D)
All states	305.7	125.9	130.0	561.6	643.1	309.4	232.1	1,184.6	1,746.2

<sup>&</sup>lt;sup>1</sup> Includes sawmill slabs and edgings, veneer cores, and post and pole trimmings. States with no pulpmills are omitted.

(D) Data withheld to avoid disclosure for individual mills.

Table 7.—Pulpwood from roundwood received from states outside the Northeast, by state (or province) or origin and species group, 1973

Receiving state <sup>1</sup>	State or province of origin	Total softwood	Total hardwood	All species
Kentucky	Illinois	0.2	9.8	10.0
	Indiana	_	18.8	18.8
	Minnesota	_	2.2	2.2
	Mississippi	128.3	243.7	372.0
	Missouri	1.1	32.9	34.0
	Tennessee	9.2	8.9	18.1
Maine	New Brunswick	141.2	44.1	185.3
	Quebec	.1	2.0	2.1
Maryland		35.4	14.8	50.2
New Hampshire	Quebec	1.2	60.5	61.7
New York	Michigan		(*)	(*)
	Ontario	1.9	10.2	12.1
	Quebec	3.9	_	3.9
Ohio	Alabama	_	2.3	2.3
	Indiana		6.1	6.1
	Michigan	_	14.7	14.7
	Virginia	_	(*)	(*)
	Wisconsin	_	3.0	3.0
Pennsylvania	Virginia	40.0	10.9	50.9
Vermont	Quebec	3.6	_	3.6
All states		366.1	484.9	851.0

<sup>&</sup>lt;sup>1</sup> States with no receipts are omitted. \* Less than 50 cords.

Table 8.—Pulpwood chip receipts from wood-using plants outside the Northeast, by state (or province) or origin and species group, 1973

[In thousands of rough cord equivalents]

Receiving state <sup>1</sup>	State or province of origin	Total softwood	Total hardwood	All species
Kentucky	Alabama	_	2.6	2.6
2	Arkansas	_	2.5	2.5
	Illinois	_	19.6	19.6
	Indiana		26.5	26.5
	Mississippi	39.2	20.7	59.9
	Missouri		38.7	38.7
	Tennessee		48.5	48.5
Maine	New Brunswick	14.7	.7	15.4
	Quebec	50.2	1.8	52.0
Maryland	Virginia	4.3	3.3	7.6
New Hampshire	Quebec	6.9	13.7	20.6
New Jersey	Virginia	3.5	1.0	4.5
New York	Ontario		31.1	31.1
	Quebec	1.0	.8	1.8
	South Carolina		(*)	(*)
Ohio	Indiana	.6	1.8	2.4
	Michigan	_	.5	.5
	Tennessee	_	2.0	2.0
	Virginia	.4	1.3	1.7
Pennsylvania		9.2	15.0	24.2
All states		130.0	232.1	362.1

<sup>&</sup>lt;sup>1</sup> States with no receipts are omitted. (\*) Less than 50 cord equivalents.

Table 9.—Pulpwood production from roundwood in the Northeast, by state and species group, 1973 [In thousands of rough cords]

	All	9.6	40.0	230.7	3,140.7	175.6	18.7	230.7	26.6	476.8	269.4	969.5	5.7	140.4	258.2	5,992.0
	Total	3.9	6.1	196.7	995.0	70.0	3.3	176.1	1.0	329.5	264.6	938.4	4.1	76.5	184.0	3,249.2
Hardwood	$\frac{ ext{Other}}{ ext{hardwoods}^1}$	2.1	3.3	54.7	838.4	3.8	1.7	159.0	1.0	295.5	59.3	607.2	2.1	9.89	51.6	2,148.3
Hard	Oak and hickory	1.8	2.8	121.4	32.5	65.6	1.6	1.5	*	5.4	177.0	262.2	2.0	7.	104.6	779.1
	Aspen and yellow-poplar	1	1	20.6	124.1	9.	1	15.6	1	28.6	28.3	0.69	I	7.2	27.8	321.8
	Total	5.1	33.9	34.0	2,145.7	105.6	15.4	54.6	25.6	147.3	4.8	31.1	1.6	63.9	74.2	2,742.8
/ood	Pine	5.1	33.9	34.0	142.4	105.5	15.4	3.5	25.6	48.8	4.7	28.0	1.6	5.6	2.99	520.8
Softwood	Hemlock and tamarack	I	I	I	234.8	Η:	1	4.2	I	24.9	Τ:	3.0	[	3.8	6.2	277.1
	Spruce and fir	I	1	1	1,768.5	1	1	46.9	1	73.6	1	T.	1	54.5	1.3	1,944.9
	State	Connecticut	Delaware	Kentucky	Maine	Maryland	Massachusetts	New Hampshire	New Jersey	New York	Ohio	Pennsylvania	Rhode Island	Vermont	West Virginia	All states

<sup>1</sup> Chiefly maple, beech, gums, elms, and birch species. (\*) Less than 50 cords.

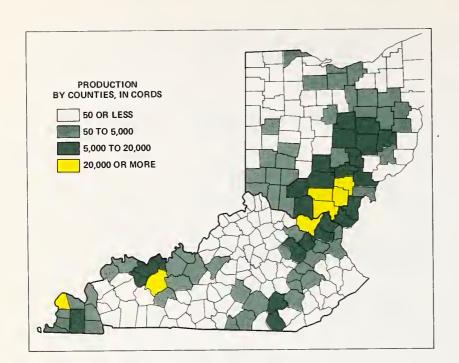


Figure 3.—Geographic pattern of pulpwood production from roundwood in Kentucky and Ohio, by county and species group, 1973.

Table 10.—Pulpwood production from roundwood in Kentucky and Ohio, by state and county and species group, 1973

[In thousands of rough cords]

		Softwo	ood			Hardv	vood		
$County^1$	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow- poplar	Oak and hickory	Other hardwoods	Total	All species
				KENTUC	KY				
Ballard	_	_	_		3.3	10.9	7.6	21.8	21.8
Bath	_		2.8	2.8	2.2	6.9	1.9	11.0	13.8
Boyd	_			_	(*)	.1	.1	.2	.2
Breathitt	_	_	.1	.1	`.1	.2	.1	.4	.5
Breckinridge	_	_	_	_	_	3.0	1.4	4.4	4.4
Butler	_	_	_	_	_	.1	.1	.2	.2
Calloway	_	_	_	_	.1	.3	1.5	1.9	1.9
Carlisle	_	_	_	_	.5	1.6	1.1	3.2	3.2
Carter	_	_	2.9	2.9	1.9	8.8	3.5	14.2	17.1
Casey	_			_	_	2.0	1.0	3.0	3.0
Clay	_	_		_	_	.2	(*)	.2	.2
Clinton	_	_		_	_	2.8	.1	2.9	2.9
Daviess	_			_	, <del></del>	3.6	1.6	5.2	5.2
Elliott	_	_	.1	.1	(*)	(*)	(*)	(*)	.1
Fleming	_	_	.1	.1	(*)	(*)	(*)	(*)	.1
Fulton	_	_	_	_	`.3	.9	.8	2.0	2.0
Graves	_	_	_	_	.9	3.2	2.4	6.5	6.5
Grayson	_	_	_	_		1.8	.8	2.6	2.6
Greenup	_	_	3.6	3.6	1.9	6.4	1.8	10.1	13.7
Hancock	_			_	_	4.2	1.9	6.1	6.1
Hardin	_	_	_	_	_	1.1	.5	1.6	1.6
Henderson	_	_	_	_		2.9	1.3	4.2	4.2
Hickman	_	_	(*)	(*)	.5	1.6	1.3	3.4	3.4
Jackson	_	_	(*)	(*) 4.9	(*)	(*) 2.6	(*)	(*) 3,6	(*) 8.5
Laurel	_	_	4.9	4.9	(*)	2.6 1.2	1.0		8.5
Lawrence	_	_	.6	.6	.4		.3	1.9	2.5 2.3
Lee	_	_	.6	.6	$\overset{.3}{4.7}$	$\frac{1.1}{17.9}$	.3 5.8	$\begin{array}{c} 1.7 \\ 28.4 \end{array}$	30.5
Lewis	_	_	2.1	2.1	4.7	17.9	0.8		.1
Livingston McCracken	_	_	_	_	.5	1.5	.1 1.1	$^{.1}_{3.1}$	3.1
McCreary	_	_	3.3	3.3	.5	1.8	1.7	3.5	6.8
Marshall	_	_	5.5	0.0	_	1.0	.1	ა.s .1	.1
Meade	_	_	_	_	_	.3	.1	.4	.4
Menifee	_	_	3.6	3.6	1.1	3.5	.9	5.5	9.1
ivieilitee			0.0	0.0	1.1	0,0	.5	0.0	CONTINUED

12

Table 10.—Continu	ıed								
		Softwo	ood			Hardy	vood		
$\operatorname{County}^1$	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow- poplar	Oak and hickory	Other hardwoods	Total	All species
Montgomery			.2	.2 2.1	.2	.5	.1	.8	1.0
Morgan	_	_	2.1	2.1	.3	.8	.2	1.3	3.4
Nelson Ohio	_		_	_		.2 14.5	$\frac{.1}{6.7}$	$\frac{.3}{21.2}$	$\begin{array}{c} .3 \\ 21.2 \end{array}$
Owsley	_	_	.2	.2	(*)	.2	(*)	.2	.4
Powell	_	_	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Pulaski Rowan	_	_	.3 1.0	.3 1.0	1.4	9.0	$^{.4}_{2.0}$	$\begin{array}{c} .4 \\ 12.4 \end{array}$	.7 13.4
Union	_		_	_		.1	(*)	.1	.1
Wayne	_	_	.6	.6	_	_	_	_	.6
Whitley Wolfe	_	_	4.8 .1	4.8 .1	(*)	3.6 (*)	3.0 (*)	6.6 (*)	11.4 .1
Total			34.0	34.0	20.6	121.4	54.7	196.7	230.7
		<del></del>		OHIO					
Adams	_	_	_	— OHIO	0.3	7.0	0.9	8,2	8.2
Ashland	_		_	_		1.3	.7	2.0	2.0
Athens	_	_	0.3	0.3	2.0	5.2	3.0	10.2	10.5
Belmont Brown	_	_		_		(*) .3	.3	(*) .7	(*) .7
Butler	_	_	_	_		.2	.2	.4	.4
Carroll	_	_	_	_	_	.7		.7	.4 .7
Clark	_	_	_	_	.3	.8	.5	1.6	1.6
Clermont Clinton			_	_		1.0	.1 .9	$\frac{.2}{2.0}$	$\frac{.2}{2.0}$
Coshocton	_	_	_	_		14.9	<del></del>	14.9	14.9
Delaware	_	_	_	_	—	(*)	<del></del>	(*)	(*)
Erie Fairfield	_	_	_	_		.4 .4	.4 .2	.8	`.8
Gallia	_	0.1	3.5	3.6	.7	5.4	1.5	7.6	$\frac{.7}{11.2}$
Greene	_		<del></del>		.i	.4	.3	.8	.8
Guernsey	_	—	_	_	_	9.7		9.7	9.7
Hamilton Harrison	_	_	_	_	_	.1 .6	.1	.2 .6	.2 .6
Highland	_		_	_	.1	3.2	2.4	5.7	5.7
Hocking	_	_		_	3.9	10.0	5.8	19.7	19.7
Holmes Huron	_	_	_	_	_	2.0		2.0	2.0
Jackson	_	_			2.3	13.2	.4 6.9	.8 22.4	.8 22.8
Knox	_	_		_	.2	4.4	.4	5.0	5.0
Lawrence	_	—	(*)	(*)	1.7	7.9	4.9	14.5	14.5
Licking Lorain	_	_	_	_	.3	$7.0 \\ .2$	.5 $.2$	7.8	7.8
Lucas	_	_	_	_	.1	.2	.1	.4 .2	.4
Meigs	_	_	.1	.1	.2	.4	$\dot{\tilde{2}}$	.8	.2 .9
Montgomory	_	_		_	_	(*)	_	(*)	(*)
Montgomery Morrow	_		_	_		.2 .1	.2	.4 .1	.4 .1
Muskingum	_	_		.2		8.9		8.9	9.1
Noble	_	_	_	_	_	.4		.4	.4
Perry Pickaway		_		_	.8 1.7	4.3 4.3	$\frac{1.2}{2.6}$	6.3	6.3
Pike	_	_	_	_	1.7	13.2	5.8	$\frac{8.6}{21.1}$	$\frac{8.6}{21.2}$
Preble	_	—	_	_	_	(*)	(*)	(*)	(*)
Richland Ross	_	_	_	_	2.9	(*)	4.6	(*)	(*)
Scioto	_	_		.1	2.9	$11.6 \\ 13.5$	4.6 4.5	19.1 20.4	$\frac{19.1}{20.5}$
Seneca		_				.2	.3	.5	.5
Shelby	_	—	_	_		.4	.2	.8	.8
Stark Tuscarawas		_	_	_	_	.4	<u> </u>	.4	2.2 33.5
Vinton	_	_	_		5.6	$\frac{2.2}{19.4}$	8.5	$\frac{2.2}{33.5}$	2.2 33.5
Warren	_	_	_	_	_	.3	.3	.6	.6
Washington Wayne	_	_	_	_		(*)	_	(*)	(*)
Wyandot		_	_	_	.1	.4 (*)	.2		.7 (*)
Total		0.1	4.7	4.8	28.3	177.0	59.3	264.6	269.4

<sup>&</sup>lt;sup>1</sup> Counties with no production are omitted. \* Less than 50 cords.

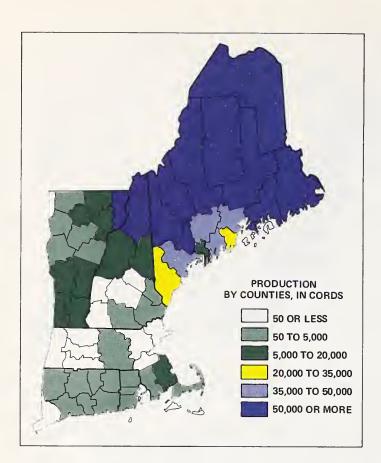


Figure 4.—Geographic pattern of pulpwood production from roundwood in the New England States, 1973.

Table 11.—Pulpwood production from roundwood in Southern New England, by state and county and species group, 1973

[In thousands of rough cords]

		Softw	ood			Hardy	vood		
$County^1$	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow- poplar	Oak and hickory	Other hardwoods	Total	All species
				CONNECT	CUT				
Hartford	_		1.2	1.2	_	_	_		1.2
Litchfield	_	_	.2	.2		_	-	-	.2 .1
Middlesex New Haven	_	_	.1	.1	_	_	_	-	1.L
New London		_	1.4	1.4 .4		0.3	0.4	$\frac{-}{0.7}$	1.4 1.1
Tolland	_	_	.4 .2	.2		.1	.2	.3	.5
Windham	_	_	1.6	1.6		1.4	1.5	2.9	4.5
Total	_	_	5.1	5.1	<del>-</del>	1.8	2.1	3.9	9.0
			M	ASSACHUS	SETTS				
Barnstable	_		1.2	1.2		_	—		1.2
Bristol	_		2.6	2.6	_	0.7	0.8	1.5	4.1
Plymouth	_		10.5	10.5	—	.9	.9	1.8	12.3
Worcester	_	_	1.1	1.1	_	-	_	—	1.1
Total		_	15.4	15.4	_	1.6	1.7	3.3	18.7
			F	RHODE ISI	AND				
Kent	_	-	0.4	0.4	_	1.1	1.1	2.2	2.6
Providence	_	_	.8	.8	-	.5	.6	1.1	1.9
Washington	_	_	.4	.4	_	.4	.4	.8	1.2
Total		_	1.6	1.6	-	2.0	2.1	4.1	5.7

<sup>&</sup>lt;sup>1</sup> Counties with no production are omitted.

Table 12.—Pulpwood production from roundwood in Northern New England, by state and county and species group, 1973 [In thousands of rough cords]

		Softw	ood			Hardy	vood		****
County <sup>1</sup>	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow- poplar	Oak and hickory	Other hardwoods	Total	All species
Androscoggin Aroostook Cumberland Franklin Hancock Kennebec Knox Lincoln Oxford Penobscot Piscataquis Sagadahoc Somerset Waldo Washington York	2.7 515.9 2.8 32.2 29.0 4.2 6.4 4.0 24.7 150.6 425.0 2.3 358.8 11.1 198.6	4.0 50.0 2.9 4.5 18.0 6.1 3.4 4.5 13.2 60.7 15.2 3.2 12.9 4.1 31.2	13.5 (*) 16.5 4.1 2.7 13.7 6.1 9.2 16.1 19.3 2.1 6.0 4.7 8.9 7.1 12.4	MAINE 20.2 565.9 22.2 40.8 49.7 24.0 15.9 17.7 54.0 230.6 442.3 11.5 376.4 24.1 236.9 13.5	32.3	0.6 3.1 .9 2.9 1.2 .9 .6 .6 4.7 4.3 3.0 .4 4.4 .8 3.7	15.2 80.8 23.5 75.2 32.1 24.1 9.7 16.8 122.5 111.6 77.9 7.1 115.4 19.7 95.3 11.5	48.1 83.9 24.4 82.3 33.5 25.3 10.3 17.4 131.4 147.4 90.0 7.5 125.2 22.2 134.2 11.9	68.3 649.8 46.6 123.1 83.2 49.3 26.2 35.1 185.4 378.0 532.3 19.0 501.6 46.3 371.1 25.4
Total	1,768.5	234.8	142.4	2,145.7	124.1	32.5	838.4	995.0	3,140.7
			N	EW HAMPS	SHIRE				
Carroll Coos Grafton Hillsboro Rockingham Strafford Sullivan	1.1 44.2 1.6 —	0.8 3.1 .3 	0.7 1.1 1.0 (*) .7 (*) (*)	2.6 48.4 2.9 (*) .7 (*) (*)	0.4 14.2 1.0 —	(*) 0.7 .4 .2 .1	14.9 135.4 8.3 .2 .1 .1	15.3 150.3 9.7 .4 .2 .2	17.9 198.7 12.6 .4 .9 .2 (*)
Total	46.9	4.2	3.5	54.6	15.6	1.5	159.0	176.1	230.7
				VERMON	T				
Addison Bennington Caledonia Chittenden Essex Franklin Lamoille Orange Orleans Rutland Washington Windham Windsor	0.9 (*) 2.2 .1 24.0 .2 10.4 2.1 2.2 2.2 .9 3.3 6.0	0.1 .4 .6 (*) .9 - .2 .3 .7 .5 - (*)	0.1 .6 .8 .5 .1 (*) .3 -3 1.1 .5 .6 .7	1.1 1.0 3.6 .6 25.0 .2 10.9 2.4 3.2 3.8 1.4 3.9 6.8	0.1 -6 .5 3.8 .1 -2 .9 .1 (*)	0.1 (*) -2 :1 (*) -1 (*) -1 .1	2.6 5.2 5.3 39.5 1.7 -7 8.2 1.5 -2.4 1.5	2.8 5.2 5.9 .5 43.5 1.9 .7 .2 9.2 1.7 .1 2.5 2.3	3.9 6.2 9.5 1.1 68.5 2.1 11.6 2.6 12.4 5.5 1.5 6.4 9.1
Total	54.5	3.8	5.6	63.9	7.2	0.7	68.6	76.5	140.4

<sup>&</sup>lt;sup>1</sup> Counties with no production are omitted. \* Less than 50 cords.

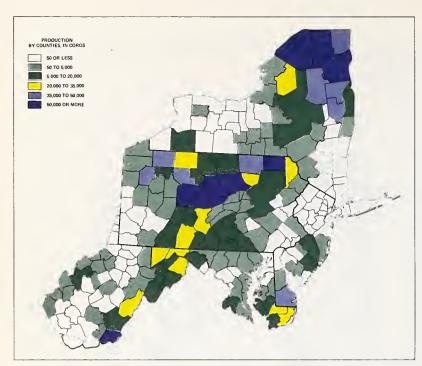


Figure 5.—Geographic pattern of pulpwood production from roundwood in the Middle Atlantic States, 1973.

Table 13.—Pulpwood production from roundwood in New York by county and species group, 1973

		Softwo	ood			Hardy	vood		
County <sup>1</sup>	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	All species
Allegany	_	(*)	(*)	(*)	_	_	_	_	(*) 3.7
Broome		_	_	_	_	_	3.7	3.7	3.7
Cattaraugus		0.3	1.0	1.3	1.6	_	2.2	3.8	5.1
Chemung	_			_	.5	0.2	.6	1.3	1.3
Chenango	3.8	_	(*)	3.8	.9	2.7	5.8	9.4	13.2
Clinton	3.7	.3	(*) 2.2	6.2	2.3	_	39.4	41.7	47.9
Columbia	_	_	(*) 1.0	(*)			_	_	(*)
Cortland	1.9	_	1.0	2.9	(*)	(*) .5	(*)	(*) 4.2	2.9
Delaware	(*)	_	_	(*)	.1	.5	3.6	4.2	4.2
Essex	1.4	3.8	5.3	10.5	3.3	_	43.0	46.3	56.8
Franklin	26.6	.1	2.3	29.0	1.8	_	22.6	24.4	53.4
Fulton	(*)	3.7	1.0	4.7	.2	_	13.3	13.5	18.2
Genesee	<u> </u>	_			.2 .2		(*)	.2	.2
Greene			(*)	(*)	_		(*)	(*)	(*) 35.2
Hamilton	3.4	1.9	`.9	6.2	1.0	<b>→</b>	28.0	29.0	35.2
Herkimer	4.4	(*)	.3	4.7	_	_	3.7	3.7	8.4
Jefferson	(*)		2.0	2.0	1.8	_	.8	2.6	4.6
Lewis	4.0	_	1.9	5.9	3.3	_	24.7	28.0	33.9
Madison	1.6	_	_	1.6	(*)	_	_	(*)	1.6
Oneida	.7	_	1.1	1.8	.1	_	7.1	7.2	9.0
Onondaga				_	(*) (*)			(*)	(*) 1.5
Oswego	(*)	_	.9	.9	(*)		.6	`.6	1.5
Otsego	(*) 3.0		4.0	7.0	`.1	_	.3	.4	7.4
Rensselaer	.2	(*)	1.7	1.9	.6	_	1.9	2.5	4.4
St. Lawrence	14.1	1.8	5.1	21.0	4.4	_	31.8	36.2	57.2
Saratoga	1.1	5.6	11.1	17.8	1.9		23.6	25.5	43.3
Schoharie	.7		1.2	1.9	_	_	(*)	(*)	1.9
Schuyler					.3	_	_	`.3	.3
Sullivan		_	_	_	_		.1	.1	.1
Tioga	_	_		_	.4	.8	1.7	2.9	2.9
Tompkins	_	_		_	$\frac{.3}{2.2}$	1.2	2.0	3.5	3.5
Warren	2.9	5.5	3.3	11.7	2.2	_	23.0	25.2	36.9
Washington	.1	1.9	2.5	4.5	1.3	_	12.0	13.3	17.8
Total	73.6	24.9	48.8	147.3	28.6	5.4	295.5	329.5	476.8

<sup>\*</sup> Less than 50 cords.

¹ Counties with no production are omitted.

Table 14.—Pulpwood production from roundwood in Pennsylvania, by county and species group, 1973

		Softwo	od			Hard	wood		
County <sup>1</sup>	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	All species
Adams	_	<del></del>	0.4	0.4	-	3.5	1.7	5.2	5.6
Armstrong	_	(*) 0.7	1	.1	(*) 6.2	(*)	4	.4	.5
Bedford	_	0.7	5. <b>4</b> .1	6.1	6.2	13.4 .2	7.2	26.8	32.9
Berks Blair		.1	.3	.4	1.4	6.3	.1 10.9	.3 18.6	.4 19.0
Bradford	_	<u>···</u>			6.5	10.3	25.4	42.2	42.2
Bucks	_	—	_	_	_	.3	.2	.5	.5
Butler	—		_		_		1.1	1.1	1.1
Cambria	_		.8	1.0	.1	1.6	6.5	8.2	9.2
Cameron Carbon	_	_	_			(*) (*)	13.0	13.0 (*)	13.0
Centre	0.1		.8	1.2	4.3	26.0	33.7	64.0	(*) 65.2
Clarion	_	_	—	_	_	(*)	1.1	1.1	1.1
Clearfield	(*)	.9	1.9	2.8	4.3	24.0	55.2	83.5	86.3
Clinton	_	.1	.3	.4	3.6	21.2	56.3	81.1	81.5
Columbia Crawford	_	_	(*)	(*)	.4	1.9	2.8 4.3	5.1 4.3	5.1 4.3
Cumberland	_	_	.9	.9	_	4.5	1.9	6.4	7.3
Dauphin	_	_	(*)	(*)	.3	1.5	2.6	4.4	4.4
Elk	_	_	_	_	—	5.4	36.3	41.7	41.7
Erie	_	<u> </u>	<u> </u>	(*)	.5	.9	3.8	3.8	$\frac{3.8}{1.7}$
Fayette	_	(*)	(*)	(*)	.o 	.9	.3 9.0	1.7 9.0	9.0
Forest Franklin	_	<u>-</u>	1.2	1.2	_	(*) 7.2	3.6	10.8	12.0
Fulton	_	(*)	2.4	2.4	(*)	4.5	3.4	7.9	10.3
Greene	_					(*) 11.4		(*)	(*) 34.9
Huntingdon	_	.5	5.4	5.9	$2.1_{-1}$		15.5	29.0	$\frac{34.9}{3.2}$
Indiana Jefferson		·1 (*)	$\frac{2.2}{.1}$	2.3 .1	.1 $.2$	.1 .4	$\frac{.7}{2.3}$	.9 2.9	3.2
Juniata	_	(*)	.7	.7	_	1.7	.7	2.4	3.1
Lackawanna	_			_	1.7	6.4	10.9	19.0	19.0
Lancaster	_	_	(*)	(*) (*)	_	.3	.1	.4	.4
Lawrence	_	_	(*) (*)	(*)	_	(*)		(*)	(*) (*)
Lebanon Luzerne	_	_	.1	.1	1.5	(*) 6.8	10.9	19.2	19.3
Lycoming	_	(*)	.3	.3	6.3	30.1	45.3	81.7	82.0
McKean	_	_	_	_	3.7	_	28.4	32.1	32.1
Mercer	_	(*)	_	_	(*)		.5	.5	.5
Mifflin Monroe	_	(*)	.1	.1	(*)	(*)	(*) 1.2	(*) 2.1	$\begin{array}{c} .1 \\ 2.1 \end{array}$
Montour	_		.1	.1		.4	.2	.6	.7
Northumberland		_	(*)	(*) .6	_	.7	.2	.9	.9 7.7
Perry		(*)	.6	.6	.4	3.8	2.9	7.1	7.7
Pike	_	_	_	_	.1	.4	.7 $14.2$	1.2 14.9	$\frac{1.2}{14.9}$
Potter Schuylkill	_	_			.1 .3	$\frac{.6}{4.2}$	3.9	8.4	8.8
Snyder	_		.4	.4	.1	.7	.6	1.4	1.8
Somerset	_	.1	1.1	1.2	3.5	6.2	6.8	16.5	17.7
Sullivan	_	_		_	4.8	7.5	20.0	32.3	32.3
Susquehanna		_		_	6.9	$\frac{29.0}{3.3}$	49.5 5.1	$85.4 \\ 10.2$	$85.4 \\ 10.2$
Tioga Union	_	_	.1	.1	1.8	3.3 1.4	.3	1.7	1.8
Venango	_	(*)	.1	.1	_		40.1	40.1	40.2
Warren	_		_	_	4.6	—	40.7	45.3	45.3
Wayne	—	_	_	_	1.7	6.0	15.1	22.8	22.8
Wyoming York	_	_	1.7	1.7	1.3	$\begin{array}{c} 4.7 \\ 2.7 \end{array}$	8.3 1.3	14.3 4.0	14.3 5.7
Total	0.1	3.0	28.0	31.1	69.0	262.2	607.2	938.4	969.5

<sup>\*</sup> Less than 50 cords.

¹ Counties with no production are omitted.

Table 15.—Pulpwood production from roundwood in Delaware, Maryland, and New Jersey, by state and county and species group, 1973

		Softwo	ood			Hardy	vood		
$County^1$	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow- poplar	Oak and hickory	Other hardwoods	Total	All species
				DELAWA	RE				
Kent New Castle Sussex	_	=	0.3 (*) 33.6	0.3 (*) 33.6	=	0.3 2.5	$\frac{0.1}{3.2}$	0.4 5.7	0.7 (*) 39.3
Total	_	_	33.9	33.9	_	2.8	3.3	6.1	40.0
				MARYLA	ND				
Allegany Anne Arundel Baltimore Calvert Caroline Carroll Cecil Charles Dorchester Frederick Garrett Harford Howard Montgomery Prince Georges Queen Annes St. Marys Somerset Talbot Washington Wicomico Worcester		0.1    (*)          -	2.8 3.3 1.6 4.0 3.1 1.6 5.2 4.8 1.2 (*) (*) (*) 4.9 16.7 .1 .5 31.2 24.2	2.9 3.3 1.6 4.0 3.1 1.6 5.2 4.8 1.2 (*) (*) (*) 4.9 16.7 .1 .5 31.2 24.2	0.3	30.7 (*) .2 (*) .2 (*) .7 .1 .7 30.7 .1 .66	0.8	31.8 (*) .2 (*) .3 .3 (*) 1.1 .5 1.1 31.6 .6 2.0 .3 .1	34.7 3.3 1.8 4.0 3.4 1.9 (*) 6.3 5.3 1.1 32.8 .1 (*) (*) (*) 4.9 16.7 .1 2.5 31.5 31.5
Total	_	0.1	105.5	105.6	0.6	65.6	3.8	70.0	175.6
				NEW JER	SEY				
Atlantic Burlington Camden Cumberland Ocean		=	6.2 12.2 2.8 .7 3.7	6.2 12.2 2.8 .7 3.7	= =	(*)	0.5 .4 .1 —	0.5 -4 -1 	6.7 12.6 2.8 .8 3.7
Total	_	_	25.6	25.6	_	(*)	1.0	1.0	26.6

<sup>&</sup>lt;sup>1</sup> Counties with no production are omitted. (\*) Less than 50 cords.

Table 16.—Pulpwood production from roundwood in West Virginia, by county and species group, 1973 [In thousands of rough cords]

		Softwe	ood			Hardy	vood		
County <sup>1</sup>	Spruce and fir	Hemlock and tamarack	Pine	Total	Aspen and yellow-poplar	Oak and hickory	Other hardwoods	Total	All species
Berkeley	_	(*)	3.5	3.5	(*)	1.6	0.8	2.4	5.9
Braxton	_	_	_	_	0.2	.2	.2	.6	.6
Cabell	_	(*)	.3	.3	(*) (*)	.1	(*)	.1	.4
Calhoun	_	(*)	.2	.2	(*)	.2	(*)	.2	.4 .5
Doddridge	_	(*)	.1	.1	.1	.3	(*)	.4	.5
Fayette	_		(*) 1.7	(*)	.6	1.3	1.6	3.5	3.5
Grant	0.6	0.3	1.7	2.6	2.2	11.3	.9	14.4	17.0
Greenbrier	.1	1.2	7.7	9.0	-:-	1.7	2.0	4.4	13.4
Hampshire	_	.9	10.3	11.2	2.3	12.3	.9	15.5	26.7
Hardy	_	.2	1.8	2.0	1.1	5.7	.4	7.2	9.2
Harrison		_	(*)	(*) 3.2	_	_	_	_	(*)
Jackson	_	.3	2.9	3.2	.4	1.9	.1	2.4	5.6
Mason	_	.2	1.6	1.8	.2	.6	.2	1.0	(*) 5.6 2.8
Mercer	Barolooma		(*)	(*)	_	_	_	_	(*) 17.2
Mineral		.3	2.9	3.2	2.1	11.1	.8	14.0	17.2
Monroe		.9	5.9	6.8	10.3	25.0	28.9	64.2	71.0
Morgan	_	.4	10.4	10.8	.7	6.2	1.5	8.4	19.2
Nicholas	_		(*)	(*)	_	_			(*)
Ohio	_		(*)	(*)		_	_		(*)
Pendleton	_	(*)	.4	.4	1.0	3.9	1.7	6.6	7.0
Pleasants	_	(*)	.1	.1	(*)	(*)	(*)	(*)	.1
Pocahontas	.6	.7	4.7	6.0	3.8	10.7	9.4	23.9	29.9
Preston	_	_	—	_	.1	.7	.1	.9	$\frac{.9}{2.7}$
Putnam	_	.2	1.7	1.9	.1	.7	(*)	.8	2.7
Randolph	(*)	(*)	.1	.1	.2	.9	.1	1.2	1.3
Ritchie	<u> </u>	(*) .3	2.5	2.8	.3	1.4	.1	1.8	4.6
Summers	_	.2	.9	1.1	.3	.8	.9	2.0	3.1
Taylor	_	_	(*) .2	(*) .2		_	_	—	(*) 1.5
Tucker	(*)	(*)	.2	.2	.2	1.0	.1	1.3	1.5
Tyler		(*)	.1	.1	(*) .2 .5	.1	(*) .5	.1	.2
Wayne	_	(*)	(*)	(*)	.2	.8	.5	1.5	1.5
Wirt	_	`.1	5.4	5.5	.5	2.7	.2	3.4	8.9 3.1
Wood	_	(*)	1.3	1.3	.2	1.4	.2	1.8	3.1
Total	1.3	6.2	66.7	74.2	27.8	104.6	51.6	184.0	258.2

<sup>\*</sup> Less than 50 cords.

¹ Counties with no production are omitted.









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